

**APPENDIX D**  
**Cultural Verification Memo**

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January 6, 2016

Ms. Daisy Covarrubias  
Senior Environmental Specialist  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92728

Subject: Cultural Resources Assessment for the Santa Ana River Interceptor Rock Removal Project (Permit Condition Compliance)

Dear Ms. Covarrubias:

This Cultural Resources Assessment was prepared for Orange County Sanitation District, to determine if cultural resources would be impacted by rock removal activities along the SARI pipeline within the Reach 9 area of the Santa Ana River.

## **REGULATORY SETTING**

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Division regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research and Sanctuaries Act. Of the State agencies, the CDFW regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

## **PROJECT DESCRIPTION AND BACKGROUND**

The Santa Ana River Interceptor pipeline (SARI) was built and maintained by the Orange County Sanitation District (OCSD) within Orange County since 1976. The Santa Ana Watershed Project Authority (SAWPA) owns and maintains the remainder of SARI within both Riverside and San Bernardino counties. SARI is a 97-mile-long regional pipeline, designed to export up to 30 million gallons per day of brine (water with a high salt content), industrial wastewater, and domestic sewage out of the upper Santa Ana River basin. SARI ultimately flows to the OCSD treatment facilities in Fountain Valley or Huntington Beach. Downstream of Prado Dam, SARI extends along the river floodplain, across the Green River Golf Club, and then partially within the flood plain to Weir Canyon Road.

The pipeline segment downstream of the golf course was particularly vulnerable to forces of erosion that caused major changes to the depth of the riverbed. In several locations, the protective soil cover above SARI was reduced far below design safety limits. Further erosion from controlled releases during a major storm were identified as a major threat to the integrity of the SARI line. There were also concerns due to the modification of Prado Dam. Temporary measures were implemented by OCSD to reduce the threat of erosion damage to the pipeline, without jeopardizing the regional flood risk management objective of the Corps' Santa Ana River Project (SARP). OCSD placed rock under emergency permits at different locations and at different times in the Santa Ana River. Permitted rock installation was done between 2005 and 2011 in accordance with Corps Permit Nos. 2005-00089-JPL, 2005-00680-JPL, 2005-00995-JPL, 2006-00006-SAD, and SPL-2008-00996, as well as Regional General Permit No. 63 for Repair and Protection Activities in Emergency Situations for work in 2010-11. To provide protection for the pipeline, rock was placed 1) as grade stabilizers in three places where the pipeline crosses the river, to preserve cover over the pipe; 2) as revetments to prevent side erosion of the river banks; and 3) as a low groin, also to constrain the lateral movement of the river. Regular maintenance has been required at the grade stabilizers and at some revetment sites in order to reconstruct protection following major storm events.

After the placement of rock for temporary protection along portions of SARI, OCSD initiated permanent improvements to protect the pipe from erosion. OCSD's pipeline abandonment and relocation project moved the SARI sewer pipeline out of the riverbed and is addressed in the *Santa Ana River Interceptor Line Protection/Relocation Final Supplemental Environmental Assessment/ Environmental Impact Report*. The project constructed a new 54-inch diameter pipeline south of the floodplain adjacent to the freeway. The Yorba Linda Spur, a 15-inch diameter interceptor feeding SARI, was constructed from La Palma Avenue due west across the river to tie in with the interceptor at the Savi Ranch shopping center to replace two connections to the old SARI pipeline. The buried SARI pipeline was filled with cellular grout, severed at river crossings, and abandoned in place. Manholes were cut off below ground surface and slurry filled. These permanent improvements were completed in 2014.

Based upon Corps Special Condition 7 of Emergency Permit SPL-2008-00996, OCSD is required, "to remove all rock rip-rap that was installed to temporarily protect the SARI line under emergency authorization. A report, detailing the completion of this work, shall be submitted to the Corps and U.S. Fish and Wildlife Service (USFWS) within 60 days of completion of the restoration activities."

Although the entire SARI line extends through Orange, Riverside, and San Bernardino Counties, the proposed rock removal activities for the proposed project would be specifically located in Orange County, along the Santa Ana River (from the Green River Golf Club downstream to the Savi Ranch Shopping Center) (refer to attached exhibits). The project site is located within the floodplain of the Santa Ana River, and is largely undeveloped open space. This portion of the Santa Ana River floodplain, within Santa Ana Canyon, is bound on the north by La Palma Avenue and the Burlington Northern Santa Fe (BNSF) railroad, and on the south by the State Route 91 Freeway (SR-91) and the Savi Ranch commercial development.

## **SITE CONDITIONS AND FINDINGS**

The project site is generally located in the floodplain of the Santa Ana River. The abandoned manholes, unimproved roads and rock piles are located in drier areas of the River, typically on the flood terrace and upland habitats. We understand that the project entails accessing the river on existing dirt roads, removing existing rock to below the waterline, and using the same dirt roads to transport the rock away for disposal.

## **CULTURAL RESOURCES REVIEW**

BonTerra Psomas recently conducted a cultural resource review and limited field survey for Reach 9 as part of an Orange County Water District project in August of 2015 (Smith and Maxon 2015). The results of the review indicate no cultural resources have been recorded at any of the rock removal or road locations. The field survey determined that dense vegetation surrounded the rock locations.

## **CONCLUSIONS AND RECOMMENDATIONS**

Because the project consists of removing rock that was previously placed in the specific locations, and access to the locations will be on existing roads, there will be no impacts to cultural resources and no cultural resources investigation or monitoring is necessary or warranted.

Please do not hesitate to contact me at 714-751-7373 or [patrick.maxon@psomas.com](mailto:patrick.maxon@psomas.com) should you have any questions or require further information.

Sincerely,  
**BonTerra Psomas**



Patrick O. Maxon, RPA  
Director, Cultural Resources

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## **REFERENCES**

Smith, David M. and Patrick Maxon  
2015 Cultural Resources Assessment Prado Basin Planned Deviation and Sediment Removal Project. Prepared for Orange County Water District, Fountain Valley, California 92708